5-23-05

IFW

Docket No.: HO-P02673US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Michael D. Schneider et al.

Application No.: 10/820,583 Examiner: Not Yet Assigned

Filed: April 8, 2004 Art Unit: N/A

For: MODULATORS OF TELOMERE STABILITY

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

A copy of each reference on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 06-2375, under Order No. HO-P02673US1.

Dated: May 20, 2005

Respectfully submitted,

By _____

Melissa W. Acosta, Ph.D.
Registration No.: 45,872
FULBRIGHT & JAWORSKI L.L.P.
Fulbright Tower
1301 McKinney, Suite 5100
Houston, Texas 77010-3095
(713) 651-5151
(713) 651-5246 (Fax)
Attorney for Applicant

PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	3

Complete if Known	
Application Number	10/820,583
Filing Date	April 8, 2004
First Named Inventor	Michael D. Schneider
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	HO-P02673US1

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-2003/0170889-A1	09-11-2003	Herron, G.S.	
	AB	US-2002/0076719-A1	06-10-2002	Lange, et al.	
	AC	US-6,472,143-B1	10-29-2002	Mikolajczyk, et al.	
	AD	US-6,451,538-B1	09-17-2002	Cowsert	
	AE	US-6,455,559-B1	09-24-2002	Pevarello, et al.	
	AF	US-6,297,356-B1	10-02-2001	DeLange, et al.	
	AG	US-6,569,658-B1	05-27-2003	Luo, et al.	
	AH	US-6,680,170-B2	01-20-2004	Plowman, et al.	
	AI	US-6,455,525-B1	09-24-2002	Singh, et al.	
	AJ	US-5,118,180	06-02-1992	Wichmann, et al.	
	AK	US-5,187,183	02-16-1993	Loscalzo, et al.	
	AL	US-6,514,719-B1	02-04-2003	Bird, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

[1] Applicant's unique citation designation number (optional). [2] See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	CA	Klobutcher, Lawrence A., et al.; All gene-sized DNA molecules in four species of hypotrichs have the same terminal sequence and an 3' terminus; Proc. Natl. Acad. Sci. USA, Vol. 78 (5), pp. 3015 - 3019 (1981).	
	CB	Allshire, Robin C., et al.; Letters to Nature - Telomeric repeat from *T. thermophila* cross hybridizes with human telomeres; Nature, Vol. 332, pp. 656 - 659 (1988).	
	CC	Blackburn, Elizabeth H., et al.; A Tandemly Repeated Sequence at the Termini of the Extrachromosomal Ribosomal RNA Genes in *Tetrahymena*; J. Mol. Biol., Vol. 120, pp. 33 - 53 (1978).	
	CD	Blackburn, Elizabeth H., et al.; Identification of a Telomeric DNA Sequence in Trypanosoma brucei; Cell, Vol. 36, pp. 447 - 457 (1984).	
	CE	Blackburn, Elizabeth H.; Switching and Signaling at the Telomere; Cell, Vol. 106, pp. 661 - 673 (2001).	
	CF	Bodnar, Andrea G., et al.; Extension of Life-Span by Introduction of Telomerase into Normal Human Cells; Science, New Series, Vol. 279 (5349), pp. 349 - 352 (1998).	
	CG	Brown, William R. A.; Letters to Nature - Molecular cloning of human telomeres in yeast; Nature, Vol. 338, pp. 774 - 776 (1989).	
	CH	Cross, Sally H., et al.; Letters to Nature - Cloning of human telomeres by complementation in yeast; Nature, Vol. 338, pp. 771 - 774 (1989).	

Examiner Signature		Date Considered	

PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known	
Application Number	10/820,583
Filing Date	April 8, 2004
First Named Inventor	Michael D. Schneider
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	HO-P02673US1

	CI	Dan, Ippeita, et al.; The Ste20 group kinases as regulators of MAP kinase cascades; TRENDS in Cell Biology, Vol. 11 (5), pp. 220 - 230 (2001).	
	CJ	de Lange, Titia; Protection of mamalian telomeres; Oncogene, Vol. 21, pp 532 - 540 (2002).	
	CK	Greider, Carol W., et al.; Commentary - Tracking Telomerase; Cell, Vol. S116, pp. S83 - S86, (2004).	
	CL	Greider, Carol W., et al.; Identification of a Specific Telomere Terminal Transferase Activity in Tetrahymena Extracts; Cell, Vol. 43, pp. 405 - 413 (1985).	
	CM	Kubasiak, Lori A., et al. Hypoxia and acidosis activate cardiac myocyte death through the Bcl-2 family protein BNIP3; Proc. Natl. Acad. Sci. USA, Vol. 99 (20), pp. 12825 - 12830 (2002).	
	CN	Hahn, William C., et al.; Inhibition of telomerase limits the growth of human cancer cells; Nature Medicine, Vol. 5 (10), pp. 1164 - 1170 (1999).	
	CO	Hirota, Hisao, et al.; Loss of a gp130 Cardiac Muscle Cell Survival Pathway is a Critical Event in the Onset of Heart Failure during Biomechanical Stress; Cell, Vol. 97, pp. 189 - 198 (1999).	
	CP	Karlseder, Jan, et al.; p53- and ATM-Dependent Apoptosis Induced by Telomeres Lacking TRF2; SCIENCE, Vol. 283, pp. 1321 - 1325 (1999).	
	CQ	Koh, Gou Young, et al.; Stable Fetal Cardiomyocyte Grafts in the Hearts of Dystrophic Mice and Dogs; J. Clin. Invest., Vol. 96, pp. 2034 - 2042 (1995).	
	CR	Lee, Han-Woong, et al.; Essential role of mouse telomerase in highly proliferative organs; Nature, Vol. 392, pp. 569 - 574 (1998).	
	CS	Lundblad, Victoria, et al.; A Mutant with a Defect in Telomere Elongation Leads to Senescence in Yeast; Cell, Vol. 57, pp. 633 - 645 (1989).	
	CT	MacLellan, W. Robb, et al.; Genetic Dissection of Cardiac Growth Control Pathways; Annual Review of Physiology, Vol 62, pp. 289 - 319 (2000).	
	CU	Manning, G., et al.; The Protein Kinase Complement of the Human Genome; SCIENCE, Vol. 298, pp. 1912 - 1934 (2002).	
	CV	McEachern, Michael J., et al.; Telomers and Their Control; Annu. Rev. Genet., Vol. 34, pp. 331 - 358 (2000).	
	CW	Oh, Hidemasa, et al.; Telomerase reverse transcriptase promotes cardiac muscle cell proliferation, hypertrophy, and survival; Proc. Natl. Acad. Sci. USA, Vol. 98 (18), pp 10308 - 10313, August 28, 2001.	
	CX	Oka, Yoshio, et al.; Inverted terminal repeat sequence in the macronuclear DNA of *Stylonychia pustulata*;; Gene, Vol. 10, pp. 301 - 306 (1980).	
	CY	Ono, Koichiro, et al.; An Evolutionarily Conserved Motif in the TAB1 C-terminal Region Is Necessary for Interaction with and Activation of TAK1 MAPKKK; The Journal of Biological Chemistry, Vol. 276 (26), pp. 24396 - 24400 (2001).	
	CZ	Pluta, Ann F., et al.; Recombination occurs during telomere formation in yeast; Nature, Vol. 337, pp. 429 - 433 (1989).	
	CA1	Richards, Eric J., et al.; Isolation of a Higher Eukaryotic Telomere from Arabidopsis thaliana; Cell, Vol. 53, pp. 127 - 136 (1988).	
	CB1	Shibuya, Hiroshi, et al.; TAB1: An Activator of the TAK1 MAPKKK in TGF-β Signal Transduction; SCIENCE, Vol. 272, pp. 1179 - 1182 (1996).	
	CC1	Stewart, Sheila A., et al.; Senescence: does it all happen at the ends?; Oncogene, Vol. 21, pp. 627 - 630 (2002).	
	CD1	Szostak, Jack W., et al.; Cloning Yeast Telomeres on Linear Plasmid Vectors; Cell, Vol. 29, pp. 245 - 255 (1982)	
	CE1	Van der Ploeg, Lex H. T., et al.; Structure of the Growing Telomeres of Trypanosomes; Cell, Vol. 36, pp. 459 - 468 (1984).	
	CF1	Weinert, Ted, et al.; Forever hopeful relations: chromatin, telomeres and checkpoints; Nature Genetics, Vol. 21, pp. 151 - 152 (1999).	
	CG1	Wong, Kwok-Kin, et al.; Telomere dysfunction impairs DNA repair and enhances sensitivity to	

Examiner Signature		Date Considered	

PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 3

Complete if Known	
Application Number	10/820,583
Filing Date	April 8, 2004
First Named Inventor	Michael D. Schneider
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	HO-P02673US1

		ionizing radiation; Nature Genetics, Vol. 26, pp. 85 - 88 (2000).	
	CH1	Yao, Zhengbin, et al.; A Novel Human STE20-related Protein Kinase, HGK, That Specifically Activates the c-Jun N-terminal Kinase Signaling Pathway; The Journal of Biological Chemistry, Vol. 274 (4), pp. 2118 - 2125(1999).	
	CI1	Yussman, Martin G., et al.; Mitochondrial death protein Nix is induced in cardiac hypertrophy and triggers apoptotic cardiomyopathy; Nature Medicine, Vol. 8 (7), pp. 725 - 730 (2002).	
	CJ1	Zhang, Dou, et al.; TAK1 is activated in the myocardium after pressure overload and is sufficient to provoke heart failure in transgenic mice; Nature Medicine, Vol. 6 (5), pp. 556 - 563 (2000).	
	CK1	Zakian, Virginia A.; Telomeres: Beginning to Understand the End; SCIENCE, Vol. 270, pp. 1601 - 1607 (1995).	
	CL1	Zhong, Zhong, et al.; A Mammalian Factor That Binds Telomeric TTAGGG Repeats In Vitro; Molecular and Cellular Biology, Vol. 12 (11), pp. 4834 - 4843 (1992).	
	CM1	Kishimoto, Kazuya, et al.; The Journal of Biological Chemistry, Vol. 275 (10), pp. 7359 - 7369 (2000).	
	CN1	Jackson, Kathyjo A., et al.; Regeneration of ischemic cardiac muscle and vascular endothelium by adult stem cells; The Journal of Clinical Investigation, Vol. 107 (11), pp. 1395 - 1402 (2001).	
	CO1	Hemann, Michael T., et al.; Telomere Dysfunction Triggers Developmentally Regulated Germ Cell Apoptosis; Molecular Biology of the Cell, Vol. 12, pp. 2023 - 2030 (2001).	
	CP1	Grepin, Claudine, et al.; Enhanced cardiogenesis in embryonic stem cells overexpressing the GATA-4 transcription factor; Development, Vol. 124, pp. 2387 - 2395 (1997).	
	CQ1	Chang, Sandy, et al.; Commentary - Telomerase extracurricular activities; Proc. Natl. Acad. Sci. USA, Vol. 99 (20), pp. 12520 - 12522 (2002).	
	CR1	Wright, Jocelyn H., et al.; The STE20 Kinase HGK Is Broadly Expressed in Human Tumor Cells and Can Modulate Cellular Transformation, Invasion, and Adhesion; Molecular and Cellular Biology, Vol. 23 (6), pp. 2068 - 2082 (2003).	
	CS1	Prowse, Karen R., et al.; Developmental and tissue-specific regulation of mouse telomerase and telomere length; Proc. Natl. Acad. Sci. USA, Vol. 92, pp. 4818 - 4822 (1995).	
	CT1	Reed, John C., et al.; Commentary - Postmitochondrial regulation of apoptosis during heart failure; Proc. Natl. Acad. Sci. USA, Vol. 96, pp. 7614 - 7616 (1999).	
	CU1	Sadoshima, Junichi, et al.; The MEKK1-JNK pathway plays a protective role in pressure overload but does not mediate cardiac hypertrophy; J. Clin. Invest., Vol. 110, pp. 271 - 279 (2002).	
	CV1	Pasumarthi, Kishore B.S., et al.; Cardiomyocyte Cell Cycle Regulation; Circ Res., Vol. 90, pp. 1044 - 1054 (2002).	
	CW1	Moyzis, Robert K., et al.; A highly conserved repetitive DNA sequence, $(TTAGGG)_n$, present at the telomeres of human chromosomes; Proc. Natl. Acad. Sci. USA, Vol. 85, pp. 6622 - 6626 (1988).	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]Applicant's unique citation designation number (optional). [2]Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	

Application No. (if known): 10/820,583 Attorney Docket No.: HO-P02673US1

Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. ER264815278US in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on May 20, 2005
Date

Ronnie Webb
Signature

Ronnie Webb
Typed or printed name of person signing Certificate

Registration Number, if applicable

(713) 651-5151
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

IDS (Citation) by Applicant (3 pages)
Information Disclosure Statement (2 pages)
Copies of prior art literature (49 articles)
Postcard